

ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 12 PAGES

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 09/26/2012		2. CONTRACT NO. (If any) EP-W-11-009		6. SHIP TO: a. NAME OF CONSIGNEE Cheryl R. Brown	
3. ORDER NO. 0016		4. REQUISITION/REFERENCE NO. See Schedule			
5. ISSUING OFFICE (Address correspondence to) HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460				b. STREET ADDRESS US EPA Headquarters--Ariel Rios Bld 1200 Pennsylvania Ave NW / MC 1804A Phone:202-566-0940 Email: Brown.cheryl@Epa.gov	
				c. CITY Washington	e. ZIP CODE 20460
7. TO: NA				f. SHIP VIA	
a. NAME OF CONTRACTOR RENAISSANCE PLANNING GROUP, INC.				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY REFERENCE YOUR: _____ Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	
c. STREET ADDRESS 121 S ORANGE AVE STE 1200				Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
d. CITY Orlando		e. STATE FL	f. ZIP CODE 32801		
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE HPOD	

11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input checked="" type="checkbox"/> a. SMALL <input type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB				12. F.O.B. POINT Destination	
13. PLACE OF a. INSPECTION Destination		b. ACCEPTANCE Destination		14. GOVERNMENT B/L NO.	
				15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)	
				16. DISCOUNT TERMS	

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: (b)(4) Task Order #0016: Enhancing EPA's Smart Location Database and Performance Indicator TOPO: Brett Van Akkeren Max Expire Date: 01/25/2013 Continued ...					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(i) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME RTP Finance Center						\$0.00
	b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center (D143-02) 109 TW Alexander Drive						\$64,840.80
c. CITY Durham		d. STATE NC	e. ZIP CODE 27711				17(i) GRAND TOTAL

22. UNITED STATES OF AMERICA BY (Signature)

23. NAME (Typed)
Jody Gosnell
TITLE: CONTRACTING/ORDERING OFFICER

ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

PAGE NO

2

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER	CONTRACT NO.	ORDER NO.
09/26/2012	EP-W-11-009	0016

ITEM NO.	SUPPLIES/SERVICES	QUANTITY ORDERED	UNIT	UNIT PRICE	AMOUNT	QUANTITY ACCEPTED
(a)	(b)	(c)	(d)	(e)	(f)	(g)
0001	<p>Admin Office: HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460 Period of Performance: 09/26/2012 to 01/25/2013</p> <p>Contract Ceiling and Funding for BASE Period</p> <p>Technical Assistance under EP-W-11-009, Task Order #0016: Enhancing EPA's Smart Location Database and Performance Indicator to be performed in accordance with the attached Statement of Work and the vendor's proposal dated July 27, 2012.</p> <p>Ceilings and Funded Amounts:</p> <p>Cost: (b)(4) Fee: (b)(4) CPFF: \$64,840.80 Requisition No: PR-OA-12-00150, PR-OA-12-00286, PR-OSWER-12-00697</p> <p>Accounting Info: 12-E4-D100AG7-301D79-2505-GQ00BZ00-12D 1D2E039-001 BFY: 12 Fund: E4 Budget Org: D100AG7 Program (PRC): 301D79 Budget (BOC): 2505 Job #: GQ00BZ00 DCN - Line ID: 12D1D2E039-001 Funding Flag: Partial Funded: \$30,000.00</p> <p>Accounting Info: 12-13-B-11W-301MA4-2505-1211W21130-001 BFY: 12 EFY: 13 Fund: B Budget Org: 11W Program (PRC): 301MA4 Budget (BOC): 2505 DCN - Line ID: 1211W21130-001 Funding Flag: Partial Funded: \$14,923.45</p> <p>Accounting Info: 12-13-B-11W-301MA4-2505-1211W21070-001 BFY: 12 EFY: 13 Fund: B Budget Org: Continued ...</p>					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

PAGE NO
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IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER
09/26/2012

CONTRACT NO.
EP-W-11-009

ORDER NO.
0016

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	11W Program (PRC): 301MA4 Budget (BOC): 2505 DCN - Line ID: 1211W21070-001 Funding Flag: Partial Funded: \$19,917.35					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

STATEMENT OF WORK:

ENVIRONMENTAL INNOVATIONS: SUSTAINABLE APPROACHES TO DEVELOPMENT

ENVIRONMENTAL INNOVATIONS: SUSTAINABLE APPROACHES TO DEVELOPMENT

The Office of Policy, Economics and Innovation (OPEI) is the primary policy arm of the EPA. OPEI provides critical analysis and management support in three broad areas: regulatory management, economic analyses and innovative approaches. Within OPEI is the Office of Cross Media Programs (OCMP). This office is responsible for building and fostering systems and approaches that promote improved environmental performance by business and by communities. OCMP conducts programs and develops policies, strategies and tools in several areas including, industrial sectors, small businesses, recognition of top environmental performers, and the environmental impacts of development policy and practice. These efforts are designed to motivate communities and facilities to function in an environmentally preferable manner. Located in OCMP, the Development, Community and Environment Division (DCED) is home to EPA's Smart Growth program. EPA's Green Building Program, also located in OCMP, is closely aligned to EPA's Smart Growth efforts. DCED works with states and communities to find ways to grow more sustainably in a way that minimizes environmental and health impacts. Smart growth development approaches have clear environmental benefits, including improved air and water quality, increased wetlands preservation, more clean-up and re-use of brownfield sites, and increased preservation of open spaces. Green building development approaches also have clear environmental benefits, including improved energy efficiency, improved indoor air quality, and reduced consumption of and waste associated with materials used in construction. To achieve its goal of more communities implementing sustainable approaches to development, DCED:

- Provides tools and technical assistance to help states and communities build capacity to make smart growth and green building happen.
- Works with sector, community, and government leaders to raise awareness of the relationship between development decisions and their impact on environmental quality (including air, water, and climate effects).
- Identifies, researches, and develops new policy initiatives to improve environmental quality by supporting smart growth and green building.
- Engages the architecture, transportation, construction, residential and commercial real estate, mortgage lending, and insurance industries to identify and remove barriers to smart growth, green building and related environmental activities.
- Facilitates cooperation and communication between various smart growth stakeholders, including participation in the Smart Growth Network, a partnership program that develops and distributes information on smart growth policies, issues and tools.
- Evaluates the environmental consequences of various patterns of and community and industry strategies for development.
- Coordinates the EPA programs working on green building related issues, and provides leadership in the development of green building standards.

The purpose of the contract(s) is to provide DCED with technical support in the areas of a) Research and Policy Analysis, b) Technical Assistance,

and c) Communications and Outreach, all of which are related to:

the impacts of current development patterns,
alternative forms of development,
the policy and regulatory framework that supports or hinders smart growth,
the development of mechanisms that encourage smart growth, green building, and related environmental practices,
improved management of community resources and growth, and
green building standards, practices, and products.

For this statement of work the term "development" means the current and future built environment which includes but is not limited to: residential, commercial, civic, industrial, and multi-use projects, as well as existing projects, new projects, redevelopment and changes in uses.

The Contractor(s) will need to be familiar with a range of legislation, rules, regulations, codes and ordinances in order to successfully conduct work under this contract. At the federal level this includes but is not limited to:

- The National Environmental Policy Act (NEPA)
- Clean Water Act (CWA) and critical components such as the National Pollutant Discharge Elimination System
- Clean Air Act (CAA) and critical components such as the National Ambient Air Quality Standards (NAAQS) and Transportation Conformity rules
- Previous Federal Highway Trust Fund reauthorization acts (ISTEA, TEA-21 SAFETEA-LU) and critical implementation mechanisms such as the State and Metropolitan Planning rules and FTA New Starts Program
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA/Superfund)
- Small Business Regulatory Enforcement Fairness Act (SBREFA)
- Federal Housing Act (FHA)
- Resource Conservation Recovery Act (RCRA)
- Safe Drinking Water Act (SDWA)
- Toxic Substances Control Act (TSCA)
- Endangered Species Act (ESA)
- Pollution Prevention Act (PPA)

At the state and local level key areas include: enabling legislation for planning and zoning, zoning laws, building codes and ordinances, housing and urban development programs (e.g., state brownfields initiatives). Additionally, familiarity with emerging state and local laws or agreements related to reducing greenhouse gas emissions will also be important. Finally, familiarity with other state and local statutes with a direct or indirect bearing on development, infrastructure, transportation, and planning will be a key area of expertise needed for the contract(s).

Identification of Contractor Employees

In all contact with the public and Government officials, contractor personnel shall identify themselves as contractor employees working under

contract to the EPA. Contractor identification badges/visitor badges shall be prominently displayed at all times and shall be clearly visible in all public settings. The contractor shall submit all analyses, options, recommendations, reports, and training materials required under this contract in draft for critical review by the Contracting Officer or the Contracting Officer's Representative. The Government will make all final regulatory, policy and interpretive decisions resulting from the contractor-provided technical support under this contract and make the final decision on all contractor provided recommendations. The contractor shall not publish or otherwise release, distribute or disclose any work product generated under this contract without obtaining EPA's express written prior approval. When submitting materials or reports that contain recommendations, the contractor shall:

- Explain or rank policy or action alternatives;
- Describe procedures used to arrive at recommendations;
- Summarize the substance of deliberations;
- Report any dissenting views;
- List sources relied upon;
- Detail the methods and considerations upon which the recommendations are based.

The contractor shall not provide any legal services to EPA under this contract, absent written advance approval from the EPA office of General Counsel.

I. BACKGROUND

Smart Growth

Current development patterns and practices have a variety of associated environmental impacts including rapid consumption of open spaces and the resulting loss of valuable riparian and ground water recharge areas, and increased reliance on auto travel which increases energy consumption, and air and water pollution. They impact local and state economies when demands for new infrastructure in outlying areas override the needs for repairs and maintenance on infrastructure in existing areas. They impact public health as evidenced in increased rates of childhood asthma and obesity, and declining opportunities for physical activity through walking or biking. Additionally, the pattern of abandoning existing areas of our communities has environmental implications associated with brownfields and impervious ground cover. Federal, state, and local policies as well as private sector decisions each play a role in determining development patterns and practices.

EPA uses the term "smart growth" to describe its range of policy, planning, and design alternatives to conventional development. DCED helped create the Smart Growth Network -- a diverse group of partners including developers, business and industrial groups, citizen activists, financiers, and government officials and others involved in development and environmental protection -- more than a decade ago. DCED continues to work with these Network partners to demonstrate the effectiveness of collaboration, educate the public, develop analytical and policy tools, and encourage environmentally-friendly development that yields improved

environmental outcomes for the entire community.

Smart growth links the location, design, and quality of the built environment to environmental, natural resource, economic and quality of life concerns. Smart growth is using land efficiently. It is development that integrates development types such as housing, office, retail, and other commercial uses at a pedestrian scale. It minimizes environmental impacts by consuming less land and reducing impervious surfaces and vehicle travel. It offers transportation and housing choices. It cleans up and redevelops brownfields and other abandoned and under utilized properties.

Smart growth communities reduce emissions of greenhouse gases that result from heating and cooling of buildings, and their transportation related emissions. The goal of smart growth is to build communities that offer a high quality of life for their citizens while protecting natural features and important ecological functions, making better use of limited fiscal and natural resources, promoting human health, mitigating the effects of development on the climate, and encouraging economic efficiency.

In June 2009, EPA joined forces with the US Department of Transportation and US Housing and Urban Development in a Partnership for Sustainable Communities. This partnership will embark upon efforts as outlined in its Partnership Agreement, to support more growth and development that conforms to the Livability Principles upon which all three federal agencies have agreed. Learn more about the Partnership at <http://www.epa.gov/smartgrowth/2009-0616-epahuddot.htm>.

Green Building

DCED collaborates closely with EPA green building programs and supports EPA's goal of facilitating the mainstream adoption of effective green building practices. An outline of EPA's green building strategy is below.

Despite the rapidly growing interest in green building, there is no widely accepted definition of what this term really means. Nor are there widely accepted standards for measuring, verifying and evaluating green building products and practices. As a science-based agency, EPA has the expertise and credibility to help fill these gaps. EPA's green building strategy commits EPA to strengthening the scientific, technical, economic and institutional foundations of green building. This includes working with other organizations and interested stakeholders to continually advance green building standards and metrics. Recognizing that much of the green building progress, to date, has been built upon breakthroughs in technology, practice, or understanding, EPA also will enhance the Agency's support for green building research and development. This research is needed to ensure green building product quality and reliability, advance knowledge of environmental and health issues associated with buildings, and increase understanding of the economic costs and benefits of green building. EPA will support research through our own programs and laboratories and through collaboration with other academic, governmental and research organizations.

As the nation's leading environmental agency, EPA has a unique platform for communicating with the public, other government agencies, and key stakeholders. EPA will increasingly use that platform to help raise

awareness about the environmental impacts and opportunities associated with buildings, so that consumers and other organizations can make better informed decisions when purchasing building-related products or services.

Recognizing that most of the attention to green building, to date, has focused on new commercial and public buildings, EPA will increase its focus on untapped opportunities for greening existing buildings and homes, which comprise the majority of the U.S. building market. In particular, the Agency will focus on providing green building information and opportunities to homeowners seeking to upgrade or renovate their homes, or otherwise improve their energy efficiency. While surveys suggest that many people would like to reduce the environmental impacts of their homes, many either do not know where to start or are overwhelmed by the breadth of information available. One way in which EPA will raise awareness is by continuing to advance the greening of our own facilities.

The *EPA Green Building Strategy* addresses a major sector of the economy that presents significant opportunities for improving environmental and public health protection. By working with others who share EPA's interests and by strategically coordinating the Agency's own building-related programs, EPA will play an important role in bringing about the widespread adoption of effective, high-performance green buildings for the benefit of this and future generations.

II. WORK AREAS

The Contractor(s) shall provide technical support in the following areas: a) Research and Policy Analysis, b) Technical Assistance, and c) Communication and Outreach. All policy options or recommendations developed by the Contractor shall be subject to Agency review and approval. The Agency will have the final determination regarding any recommendations developed by the Contractor(s).

II. A. RESEARCH AND POLICY ANALYSIS

The research and policy analysis needs of EPA fall generally into the following two subcategories, which are described in detail below: 1) Qualitative Research, Quantitative Analysis, Modeling, and Database Management, and 2) Development and Analysis of Policy Options.

II.A.1. Qualitative Research, Quantitative Analysis, Modeling, and Database Management

The Contractor(s) shall conduct research/analysis, collect and present data, regarding the substantive topics described in "*Section III, Subject Areas of Research, Data Gathering, Analysis, Communications and Outreach, and Technical Assistance.*" Briefly, this includes but is not limited to the following activities:

- _ Gathering and presenting data
- _ Gathering qualitative information on best practices
- _ Quantitative analysis and modeling
- _ Spatial analysis using Geographic Information Systems (GIS).
- _ Survey research (consistent with OMB guidelines)
- _ Building and managing databases

a) The Contractor(s) shall collect both qualitative information (e.g. best practices case studies) and data related to the topic areas identified under Section III of this Statement of Work. Examples include but are not limited to:

- _ Successful, alternatives to low-density, auto dependent, single-use, greenfield development that improve environmental performance of communities. This includes more sustainable community-based environmental practices by the public and private sectors;
- _ Development and transportation planning programs that engage a broad base of stakeholders and achieve truly integrated approaches to planning;
- _ Innovative financing and development of smart growth communities, including transit-oriented, mixed-use projects built to green building standards;
- _ Programs and policies that address the development, infrastructure, and transportation sectors' impact on air and water quality at the regional, airshed, and watershed levels;
- _ Policies, programs, projects that improve health outcomes for residents from a variety of demographic backgrounds;
- _ Innovative community engagement and input;
- _ Open space, working lands and habitat restoration and preservation;
- _ Coastal development in the face of rising sea levels caused by climate

change;

- Green products and materials data;
- Market share data on green buildings and green products;
- Programs and policies designed to incentivize green building; and
- Other examples of successful and unsuccessful policies, programs and projects.

b) **Quantitative Analysis and Modeling.** The Contractor(s) shall use tools and techniques which are commonly accepted in the fields of data analysis, econometrics and statistics to perform analyses related to the topics listed in *Section III, "Subject Matter Expertise Needed for Work Areas."*

Examples of potential topics of such data analysis and modeling include, but are not limited to, discerning the relationships between different forms of development (e.g., conventional suburban development or infill), different construction practices (LEED-certifiable or conventional), and corresponding infrastructure or transportation systems, and the different outcomes associated with those options (e.g., a particular indicator of environmental, fiscal, or economic impacts). Modeling shall also be used in some cases to support projects listed below, under *II.A.2. Development and Analysis of Policy Options*.

Data shall be derived from the housing, commercial, industrial, real estate market, transportation, environmental, and other sectors, from public or private sources. The copyright or proprietary nature of such data shall be adhered to at all times. The contract may require the use of the following tools and techniques:

- Development of simple *spreadsheet based analytical tools*. (may include programming of macros in Microsoft Excel)
- *Economic analysis*: decision analysis, revealed preference and contingent valuation techniques;
- *Real estate analysis*: market studies, hedonic price/property value models financial investment models and pro forma analysis.
- *Fiscal analysis*: local government fiscal impact models, capital project cost estimation, revenue forecasting, financial analysis for public revenue or general obligation bonds;
- Other *multivariate statistical analysis*: nested choice models, cluster analysis, factor analysis, or other
- *Environmental impact modeling*: evaluating the impact of development on specific indicators of environmental quality, such as air quality, water quality, emissions, climate protection, loss of open space, habitat fragmentation, etc.;
- *Health impact models*: evaluating the impact of development on indicators of public and community health, including asthma, obesity, cardio-respiratory incidents, etc.;
- *Cost benefit or cost effectiveness analysis* of government laws, rules, regulations and programs, including brownfields cleanup and redevelopment; and
- *Payback period analysis* for investments in green building components (products and techniques), green infrastructure systems, and/or other sustainable approaches to development and construction.

c) **Spatial Analysis/Geographic Information Systems (GIS).** The Contractor(s) shall use GIS either to provide spatial statistics/variables

for analyses described above, use other techniques unique to spatial analysis (overlays, area/distance/network calculations, etc.), or create maps summarizing critical information (e.g. developable parcels in a station area, location of critical natural resources, etc.). The Contractor(s) shall obtain available sources of demographic, socio-economic, environmental, health, business/industry sector, and real estate data, and code/map it via GIS (if necessary) at the county, city, census tract and block levels of resolution to show impacts of prevailing and alternative patterns of development and planning on communities. The Contractor(s) shall create GIS models or maps in such a way that data and/or outputs may be aggregated or disaggregated, and may be presented on a sector-specific basis (e.g., housing data separate from industry data).

d) Surveys. The Contractor(s) shall provide capacity to carry out surveys. This includes planning, designing, conducting, analyzing and presenting the results of surveys, and assisting DCED, and other offices and regions in EPA, in how to design, conduct and analyze surveys.

Note: Surveys shall be conducted consistent with the EPA Survey Management Handbook, dated May 2003.

e) Database Management. As specified by work assignments, the Contractor(s) shall create, manage and update spreadsheets or databases relevant to substantive issues listed in Section III, "Subject Matter Expertise Needed for Work Areas" or to support analyses listed under "Development and Analysis of Policy Options." The Contractor(s) shall provide databases with capabilities for database linkage and easy updating, revision, and transfer of data. Such spreadsheets or databases shall be developed for wide distribution or use by DCED, OCMP, OPEI, other EPA offices and regions, the general public, and other partners.

The Contractor(s) shall provide legends and clear labeling of tables in data analyses to fully document the data collection and analysis methodology/assumptions. As specified in the Work Assignments, deliverables (including interim products) shall be given to the government in Lotus Notes, Microsoft Excel or Quattro-Pro format (or other software compatible with the EPA's systems). The Contractor(s) shall convert database files from larger Statistical Analysis Software (SAS) or Statistical Product Service Solution (SPSS) models to a compatible format (e.g., Quattro Pro or Excel).

II.A.2. Development and Analysis of Policy Options

The Contractor(s) shall identify, develop, and evaluate statutory, policy, or program options, at the federal, state, and local levels as well as within industry sectors, companies and organizations. These options may prompt changes in the prevailing incentives for current development and infrastructure systems and/or provide disincentives or incentives for smart growth development and, green building, and related environmental practices. The Contractor(s) shall provide a final product following such analysis, such as a report, workshop, presentation, or other work product, as specified in the work assignments. The Contractor(s) shall analyze and develop policies, programs and other activities related to the subject areas listed in Section III of this statement of work. Examples of this work include but are not limited to:

- Evaluation of federal policies and identification of potential policy changes
- Evaluation of state, local, or industry policies and identification of potential policy changes
- Evaluation of the potential to incorporate development, transportation and sustainability considerations into implementation of current environmental programs
- Analysis and development of policies which could be used to support greater private-sector financing for compact, mixed-use, walkable, development including infill and/or brownfields redevelopment and green building
- Analysis of distributional impacts of current policies, and recommendations of policy changes
- Evaluation of the comparative advantages and disadvantages of housing or business location in communities with different development patterns, infrastructure choices, and construction requirements
- Evaluation of the impacts government policies have had on the structure of the construction, development, infrastructure, and transportation industries and how they operate
- Evaluation of the cost-effectiveness of green building practices
- Evaluation of the performance of green buildings and their systems.
- Barriers to green building practices.

a) Evaluation of federal policies and identification of potential policy changes. The Contractor(s) shall identify federal policies that act as incentives for current development or disincentives for more sustainable smart growth and green building development and infrastructure and related environmental practices. This may include analysis of policies in taxation, transportation, housing, construction, water quality, water supply, water-related infrastructure, energy, economic development, environmental regulation, utility regulation, or other related sectors, facilities or small businesses. The Contractor(s) shall also identify and analyze policies that would encourage development of previously developed sites, such as infill sites or brownfields. The Contractor(s) shall analyze and develop alternative policies and how they would be most effective in changing development patterns and practices to create more sustainable, healthy and protective environments. These results will then be provided to the PO for critical review, comments and approval.

b) Evaluation of state, local, or industry policies and identification of potential policy changes. The Contractor(s) shall identify state, local or industry policies, rules, regulations, codes, ordinances, conventions or practices which act as incentives for more sustainable smart growth and green building development and infrastructure, and related environmental practices. The Contractor(s) shall analyze different options for changing policies, rules, regulations, codes, ordinances, conventions or practices to promote smart growth, green building, and related environmental activities. Such studies shall focus on one or more specific sites, cities, states, regions, or industries as directed by the PO or WAM under a specific work assignment. This type of analysis may require on-site research and work. The Contractor(s) shall also identify and analyze state, local, or industry policies, rules, regulations, codes, ordinances, conventions or practices which would discourage development

of previously developed sites -- infill sites or brownfields, or green building. The Contractor(s) shall analyze and develop alternative policies and how they would be most effective in changing development patterns and practices. These results will then be provided to the PO for critical review, comments and approval.

c) Evaluation and development of methods that recognize the benefits of more environmentally responsible development in environmental programs. An example would be giving credits to municipalities under the Clean Air Act for building compact, pedestrian-friendly mixed-use developments, built to green building standards, which tend to decrease automobile travel and increase energy efficiency. Another example would be recognizing the reductions in stormwater runoff that result from redeveloping a site that already had impervious surface, e.g., a parking lot being redeveloped as residences, and representing those benefits in the form of supportive policy allowances.

d) Analysis and development of policies that could be used to support greater private-sector financing for compact, mixed-use, walkable, development, built to green building standards, including infill and/or brownfields redevelopment. The Contractor(s) shall evaluate the connections between public sector policies and the prevalence of private-sector financing of various forms of development, such as brownfields or infill. The Contractor(s) shall identify policy options to support smart growth and green building development options.

e) Analysis of distributional impacts of current policies, and recommendations of policy changes. The Contractor(s) shall evaluate distributional impacts of different forms of development. This analysis may involve estimates of income effects and willingness to pay for more sustainable smart growth and green building development and infrastructure, and related environmental practices. This requires identification of benefits such as financial, economic, fiscal, health, and environmental benefits; stakeholders; distributional impacts across demographic groups (such as the elderly and young); and geographic entities, as well as an assessment of the permanency and magnitude of development impacts.

f) Evaluation of the comparative advantages and disadvantages of housing or business location in communities with more sustainable smart growth and green building development and infrastructure, and related environmental practices. The Contractor(s) shall quantify economics associated with location in more and less densely populated areas, areas with differing development patterns, and areas with different infrastructure systems. The Contractor(s) shall include factors related to population density and the provision of government and utility services (e.g., energy, telecommunications, water infrastructure), as well as access to commercial markets.

g) Evaluations of the impact government policies have had on the structure of the construction, development, infrastructure, and transportation industries and how they operate. The Contractor(s) shall evaluate how current and past government policies have affected the structure of the construction, development, finance, infrastructure, and transportation industries. The Contractor(s) shall assess how this structure affects

growth patterns, community sustainability and the environmental, health, economic and fiscal impacts of the development and its associated transportation and infrastructure systems. The Contractor(s) shall develop policy options to encourage the creation of industry structures or best practices to promote more sustainable smart growth and green building development and infrastructure, and related environmental practices.

h) Evaluation of the cost-effectiveness of green building practices. The Contractor(s) shall evaluate green building practices and analyze at what rate any additional costs in products, building techniques, or permitting are recouped through higher building value or energy and/or water savings. The Contractor(s) shall assess the economic impact of green buildings in terms of reduced environmental damage, inhabitant or worker productivity, and other factors.

i) Evaluation of the performance of green buildings and their systems. The Contractor(s) shall assess the performance of green buildings and green building features. The assessment shall include a recommendation as to whether the performance of green buildings and their features are meeting expectations, identify any unforeseen problems or benefits, gauge the level of occupant satisfaction and health, and include recommendations for improvement. The assessment shall include comparisons of green building practices and types using national and international examples.

j) The Contractor(s) shall also identify barriers to greater penetration of green products in the marketplace and suggest a means to overcome those barriers. In addition, the Contractor(s) shall identify barriers to green building practices and a means to overcome those barriers. The Contractor(s) shall identify barriers, challenges and solutions in third party green building standards

II. B. TECHNICAL ASSISTANCE

The Contractor(s) shall assist DCED staff in supporting technical assistance programs or projects sponsored by key partners (EPA program and regional offices, local and state government, industry trade groups and non-profit organizations). Technical assistance efforts will include any effort to build capacity in a local, regional or state entity to implement strategies related to construction, development, infrastructure (water, sewer, utilities, and transportation networks), and planning issues that result in improved environmental, health, economic, fiscal and social impacts. Technical assistance also supports DCED's ability to more fully explore and understand the implications of various design and policy options in the real world. The activities conducted under this task include but are not limited to:

- Developing and offering options for strengthening leadership practices among target audience;
- Providing technical and administrative support for all meetings and events (see *II.C.5. Events*, below);
- Developing materials in preparation for technical assistance efforts, including but not limited to modeling outcomes of different development approaches, completing market or economic analyses, or developing model code language for discussion;
- Providing assistance with community engagement; community design assistance (including charrettes, visioning exercises, and visual preference surveys), and policy development for community discussion;
- Providing financial, environmental, fiscal, health and economic analyses to assist with evaluation or implementation of options generated by technical assistance efforts.

All work will be done in close coordination with and subject to approval by WAM and/or PO.

II. C. COMMUNICATION AND OUTREACH

As directed by EPA, the Contractor(s) shall create outreach materials and information related to construction, development, transportation, infrastructure, and planning issues as well as their related environmental, health, economic, fiscal and social impacts. The Contractor(s) shall communicate and disseminate this information across EPA and to state and local governments, tribes, the public, industry, local or national environmental groups, small businesses, and other organizations. Communication efforts may include, but are not limited to:

- Publications
- Reports
- Multimedia Presentations (including print, video and audio formats)
- Web development support
- Events
- Outreach

Publications: The Contractor(s) shall prepare drafts and then a print ready copy of the document in the required format, for publication in the Federal Register, professional journals, trade press, and/or online as a web page according to the PO and/or the WAM's documented technical direction. The Contractor(s) shall coordinate with the National Technical Information Service (NTIS) and other identified entities as appropriate to make documents available to the public (includes copying materials to go to NTIS if needed, keeping track of documents, and delivering materials to NTIS and others). When provided a mailing list by the PO and/or the WAM, the Contractor(s) shall distribute the specified materials to the recipients listed. The Contractor(s) shall develop or expand mailing lists as requested by the WAM and PO. Forms of output include, but are not limited to, guidance documents, primers, reports, technical manuals, outreach pamphlets, brochures, and fact sheets. All materials generated by the Contractor(s) for distribution or publication must be reviewed and approved in writing by the Agency prior to publication or distribution.

The Contractor(s) shall also provide EPA with logistics support for conducting peer review of documents in accordance with EPA Peer Review Policy.

Reports: The Contractor(s) shall provide EPA with various research, evaluation and analytical reports; option papers, recommendations, and proposals; minutes, summaries, and findings from meetings; internet and electronic data base and information inventories.

Multimedia Presentations: The Contractor(s) shall provide video, audio, and computer-based production and editing for the communication of ideas, studies, analysis developed under other parts of this contract, or from other sources of EPA work, in a variety of formats. The specific format and deliverables will be specified in the work assignments.

Web Development Support: The Contractor(s) shall provide web services both on a project-specific basis and to effectively communicate smart growth and green building policies, programs and projects on a broad scale to states, local governments, industry, relevant stakeholders, interested

parties and groups, and the general public. These web services shall include, but are not limited to:

- Maintain existing web sites and databases, including the design, testing, and implementation of enhancements, adding new modules, and fixing bugs in a short timeframe.
- Design and test new web sites and databases to support smart growth and related environmental activities. Designs will be tested and optimized for different browser conditions and operating environments.
- Assess the functionality of existing green building, smart growth and policy development websites to determine needed improvements and upgrades.
- Ensure that all web work is in compliance with Agency and Government-wide web policies and requirements.
- Develop and implement webinars, webcasts, and podcasts, or other similar services.

Events: The Contractor(s) shall provide technical and administrative support for informational and training events about innovation both within the Agency and including others. Events include meetings, conferences, workshops, focus groups, public hearings, and other public involvement events. These events may be limited to participants from within the Agency, include EPA and other regulatory agencies, key stakeholder groups, or may be open to the general public, and may be national, regional, or local in scope.

- Technical support includes, but is not limited to, researching and preparing background information; facilitating sessions; recording sessions and preparing and analyzing minutes, summaries, and proceedings. Forms of outputs may include research and technical analysis of issues raised by affected or concerned participants. The Contractor(s) shall clearly indicate the assumptions made, sources used and not used, and methodological choices made both conceptually and in data selection. All training material used shall be reviewed and approved in writing by EPA prior to their distribution.
- Administrative support includes, but is not limited to, preparing mailing lists, correspondence, name badges, registration packets, developing on-line secured sites, managing registration, and paying hotel bills, purchasing conference materials such as notepads and folders, producing flyers and agendas, arranging for working meals, staffing for the registration desk, distribution of EPA material to the general public at booths or other conference-sponsored format, and procuring audio-visual equipment.

Outreach: The Contractor(s) shall identify the relevant stakeholders, organizations, or constituents to involve in policy planning, conferences, workshops, or events regarding policy initiatives, as specified in a work assignment. The Contractor(s) shall provide support for marketing of products, including providing bound and electronic copies for the intended audience, and identifying relevant trade, non-profit associations and forums to disseminate EPA's publications or pamphlets. Nothing shall be distributed without prior EPA review and written approval by the WAM and/or PO.

III. SUBJECT MATTER EXPERTISE NEEDED FOR WORK AREAS

This statement of work requires an inter-disciplinary approach to assess, develop, and evaluate issues related to development and their impacts on the environment, human health, economy, and social well-being. This may require the Contractor(s) to conduct qualitative research, quantitative analysis, modeling and database management; outreach and education; technical assistance; and development and analysis of policy options on subject areas that include, but are not limited to, the following areas:

Environmental Impacts

- Environmental impacts (air, water, climate, land) of various development patterns
- Environmental impacts (air, water, climate, land) of different transportation systems
- Environmental impacts (air, water, climate, land) of infrastructure alternatives (water, sewer, septic, stormwater, roads, sidewalks, etc.,)
- Environmental impacts (air, water, climate, land) of construction techniques and practices
- Environmental impacts (air, water, climate, land) of land preservation strategies
- Impact of environmental regulation and planning practices of local, regional, and state governments
- Stormwater impacts of development at the site, community, regional and watershed levels
- Energy efficiency and climate impacts of building technologies and design, community design, infrastructure, and transportation systems
- Environmentally responsible infrastructure and transportation system designs
- Strategies for climate protection and their associated requirements on building, planning, and funding for all aspects of development
- Strategies for improving water quality and their associated requirements on building, planning, and funding for all aspects of development
- Water quality and quantity impacts of development, infrastructure, and transportation options
- Strategies for improving air quality and their associated requirements on building, planning, and funding for all aspects of development
- Local, regional, and state transportation planning processes
- Community environmental performance indicators across all media associated with different development approaches.
- More sustainable, community-based environmental practices
- Development, transportation and infrastructure impacts on the preservation and restoration of habitats, streams, watersheds, forest, farmland and other green space
- Environmental impacts of changes associated with climate change and impact on development, such as rising sea levels and their implications for coastal development practices

Housing and Community Design

- Smart growth community design, including New Urban and Traditional Neighborhood Design, Mixed-use Development, Transit Oriented Development
- Conventional community design
- The impact of rural, suburban and urban design contexts on enabling policy and enforcement frameworks
- Conservation design, riparian zone protection, habitat management, stormwater infiltration strategies and/or best practices
- Site planning including the use of planned unit developments and cluster zoning
- Energy efficient design, including green building and sustainable design
- Healthy community design, including active aging and active living design
- Natural disaster and hazard planning, resiliency, recovery, and adaptation strategies
- Local planning, zoning processes, and land development regulations
- State planning and zoning enabling legislation
- Community engagement and stakeholder involvement in development planning and implementation
- Community engagement and stakeholder involvement in design and planning efforts to achieve environmental protection (e.g. land trusts, climate protection strategies, watershed protection efforts)
- Innovative local planning and zoning methods including Form-Based Codes, the Smart Code, and Sustainability Codes
- Innovative community participation programs for planning
- Housing incentives such as density bonuses, low income housing tax credits, and housing trust funds and other state local affordable housing programs
- Inclusionary zoning policies
- Community green infrastructure design, including low-impact development
- Military base closures, expansions, and redevelopments
- The impact of water quality/source water protection on site design
- Community-wide or regional environmental management planning and practices
- Urban growth boundaries and annexation policies
- School, park, and other civic use location, design and function
- Coastal and waterfront design and building
- Building codes (including green building standards) that encourage sustainable approaches to development and construction
- Zoning and planning for different housing types
- Planning for and prioritizing open space protection, including acquisition, easements, agricultural reserves, and zoning

Infrastructure and Transportation Systems

- Impacts of infrastructure investments (water, sewer, utilities, and transportation networks) on development patterns, and vice versa

- Local, regional, and state infrastructure (water, sewer, utilities, and transportation networks) planning, policies, and processes
- Financing different infrastructure approaches (water, sewer, utilities, and transportation networks)
- Federal funding, policies and processes for supporting (or inhibiting improved investments in) infrastructure (water, sewer, utilities, and transportation networks).
- The impact of different development patterns on transportation outcomes and other infrastructure needs
- Optimizing transportation and infrastructure resources, through fix-it-first policies, multimodal corridor planning, location efficient housing, and improving jobs/housing balance at the community and regional scale
- Parking, community design and walkability, including alternative parking standards
- Street design, street networks, streetscape design and transportation choice, including alternative street standards
- Street and infrastructure alternatives, including "green streets" and "complete streets"
- Commercial corridor redevelopment, including streetcar system planning
- Impacts of development, design and intensity on viable transportation choice
- Community design impacts on household and government transportation spending
- Regional and state transportation planning policies and processes
- Transportation funding, policies, and processes at federal, state, and community level
- Resiliency and adaptation in infrastructure (water, sewer, utilities, and transportation networks) to changes associated with climate change
- Disaster recovery and mitigation (to natural or other large-scale incidents), including changes for infrastructure and transportation planning and funding
- Energy impacts of infrastructure (water, sewer, utilities, and transportation networks) options
- Impact of demographic trends on transportation patterns, housing preferences and business location decisions
- Impact of energy costs on transportation patterns, housing preferences and business location decisions
- Freight transportation systems design and effectiveness, including ports, overland travel, and their impacts on communities
- Transportation system design and the provision of emergency services

Health

- Health impacts of various community design patterns, such as transit-oriented development, conventional suburban development, and compact mixed-use infill development.
- "Healthy community" programs, including active aging and active living programs

- Development patterns and demographic changes, including aging populations, immigration patterns, and household size
- Community design and children's health
- Mental health and open space
- Building material health impacts
- Health impacts of different infrastructure and transportation alternatives
- Public health impacts of transportation and community design
- Indoor air quality
- Public health impacts of different transportation systems, including freight traffic and port expansion
- Health impact assessments

Real Estate Finance and Development

- Brownfield and infill development, land acquisition, clean up, design, finance, marketing, leasing and sales well as fiscal, economic and environmental impacts.
- Traditional neighborhood development design, finance, marketing, leasing and sales, as well as fiscal, economic and environmental impacts.
- Transit-oriented development design, finance, marketing, leasing and sales, as well as fiscal, economic and environmental impacts.
- Real estate finance, investment and lending markets and their impacts on alternative community designs
- Insurance and appraisal practices and impacts on development
- Real estate marketing and rating criteria and impact on development
- Private, public, or quasi-public markets for financing energy efficiency or climate protection, such as regional cap and trade programs
- Standards for certification of green building practices and materials (for new and existing construction, communities, and other applications)
- Financial or policy support for affordable housing and impacts on development
- Trends in commercial and residential tenant location decisions
- Trends in residential, office and retail development and tenancing
- Impacts of demographic trends on development industry
- Alternative financing for compact, mixed-use or infill development
- Industry standards that create disincentives/incentives for alternative community design and green building
- Innovative programs of community involvement in development planning and stakeholder involvement processes
- Development review and approval processes and their impact on development patterns and practices, including streamlining policies, innovations, and techniques
- Smart growth audits and water quality audits
- Tax, economic development, agricultural policies which impact development patterns and practices
- Financial barriers to green building

- Green building incentive programs, including rebates, tax waivers, and others

Public Sector Finance / Fiscal Impacts of Development

- Fiscal impacts (at local, regional, state and federal levels) – revenue and costs--of different development types
- Fiscal impacts (at local, regional, state and federal levels) – revenue and costs--of different approaches to infrastructure and transportation
- Fiscal impacts (at local, regional, state and federal levels) – revenue and costs--of different construction techniques and practices
- Fiscal impacts (at local, regional, state and federal levels) – revenue and costs--of different land preservation strategies
- Municipal fiscal performance measures and how they are affected by different types and patterns of development
- Fiscal impacts of different environmental outcomes from development, and their mitigation and/or reduction
- Fiscal zoning
- Federal, state and local regulatory and fiscal incentives and disincentives for smart growth and green building
- Impact of fiscal policy on development
- Municipal, regional and state economic and community development strategies that support or undermine smart growth activities and green building

Appendix A. Variables to include in the SLD

Variable	Description	Suggested data source(s)	Coverage
GeoID	Census block group 12-digit FIPS code	2010 Census TIGER/Line	Entire U.S.
CFIPS	State and county FIPS code	2010 Census TIGER/Line	Entire U.S.
MSA	Name of MSA in which CBG resides	2010 Census TIGER/Line	Entire U.S.
CCBSA	FIPS for core based statistical area in which CBG resides	2010 Census TIGER/Line	Entire U.S.
FIPS_TR	Census tract FIPS code in which CBG resides	2010 Census TIGER/Line	Entire U.S.
Ac_Land	Total land area in acres	2010 Census TIGER/Line	Entire U.S.
Ac_Unpr	Total land area in acres that is not protected from development (i.e., not a park or conservation area)	Census, Navteq parks, PAD-US	Entire U.S.
HU2010	Housing units, 2010	2010 decennial Census	Entire U.S.
POP2010	Population, 2010	2010 decennial Census	Entire U.S.
EMP2010	Total employment, 2010	Census LEHD, 2010	Entire U.S.
EmpInd10	Employment in industrial and manufacturing sectors, 2010	Census LEHD, 2010	Entire U.S.
EmpEnt10	Employment in entertainment, accommodations, and food services (NAICS 71-72), 2010	Census LEHD, 2010	Entire U.S.
EmpRet10	Employment in "Retail Trade" (NAICS 44-45), 2010	Census LEHD, 2010	Entire U.S.
EmpSer10	Employment in "all other services" sector, 2010	Census LEHD, 2010	Entire U.S.
LowWageWk	# of workers earning \$1250/month or less (home location), 2010	Census LEHD, 2010	Entire U.S.
P_WrkAge	Percent of population that is working aged, 2010	2010 decennial Census	Entire U.S.
Prop025	Proportion of CBG within ¼ mile of fixed-guideway transit stop	CTOD (provided by EPA)	Entire U.S.
Prop05	Proportion of CBG within ½ mile of fixed-guideway transit stop	CTOD (provided by EPA)	Entire U.S.
D1a	Gross residential density (HU/acre) on unprotected land	Derived from other SLD variables	Entire U.S.
D1b	Gross population density (people/acre) on unprotected land	Derived from other SLD variables	Entire U.S.
D1c	Gross employment density (people/acre) on unprotected land	Derived from other SLD variables	Entire U.S.

D2	Land use diversity (or entropy)	Census (2010 decennial and LHED)	Entire U.S.
D3	Intersection density	TIGER/Navteq/other	Entire U.S.
D4	One or more measures of transit availability and/or frequency of service	CTOD (provided by EPA); Publically available GTFS data sources; other	Subject to data availability
D5ae	Working age population within 30 miles, gravity weighted	Derived from SLDv0.2b	Conterminous U.S.
D5ar	Jobs within 30 miles, gravity weighted	Derived from SLDv0.2b	Conterminous U.S.
D5be	Working-age population within 30-minute transit commute	Derived from SLDv0.2b	Subject to data availability
D5br	Jobs within 30-minute transit commute	Derived from SLDv0.2b	Subject to data availability
D5c	Alternative measure(s) of destination accessibility via transit	CTOD (provided by EPA); Publically available GTFS data sources; other	Subject to data availability

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE OF PAGES 1 2		
2. AMENDMENT/MODIFICATION NO. 001		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO. PR-OA-12-00150		5. PROJECT NO. (If applicable)	
6. ISSUED BY HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460		CODE HPOD		7. ADMINISTERED BY (If other than Item 6) HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460		CODE HPOD	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) RENAISSANCE PLANNING GROUP, INC. Attn: NA 121 S ORANGE AVE STE 1200 Orlando FL 32801				(x)			9A. AMENDMENT OF SOLICITATION NO.
							9B. DATED (SEE ITEM 11)
				x			10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-11-009 0016
							10B. DATED (SEE ITEM 13) 09/26/2012
CODE (b)(4)				FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) 52.243-2 -- Changes -- Cost-Reimbursement

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ 0 _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: (b)(4)

Task Order #0016: Enhancing EPA's Smart Location Database and Performance Indicator

TOPO: Brett Van Akkeren Max Expire Date: 01/25/2013

The purpose of this modification is to extend the period of performance of the TO from 01/25/2013 to 07/05/2013 at no additional cost to the government. This modification also approves the contractors revised deliverable schedule dated 01/10/2013. All other terms and conditions of the contract remain unchanged.

LIST OF CHANGES:

Reason for Modification : Change Order

Period Of Performance End Date changed from 25-JAN-13 to 05-JUL-13

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Kathryn Barton	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA (Signature of Contracting Officer)	16C. DATE SIGNED

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED

EP-W-11-009/0016/001

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NAME OF OFFEROR OR CONTRACTOR

RENAISSANCE PLANNING GROUP, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>HANGES FOR LINE ITEM NUMBER: 1 End Date changed from 25-JAN-13 to 05-JUL-13</p> <p>Delivery Location Code: HPOD HPOD US Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N. W. Mail Code: 3803R Washington DC 20460 USA</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (D143-02) 109 TW Alexander Drive Durham NC 27711</p> <p>FOB: Destination Period of Performance: 09/26/2012 to 07/05/2013</p>				

Performance Schedule for EPA RFO #0016: Enhancing SLD and Performance Indicator

(Revised January 10, 2013)

Task 1: Update & Enhance SLD Database

Subtask 1.1: Kickoff meeting

Subtask 1.2: Detailed Data

Development Plan

Subtask 1.3: Develop SLD Database

Task 2: Develop Smart Location Evaluation Method

Subtask 2.1: Literature Review & Task
2 Kickoff

Subtask 2.2: Guidance to Database
Development Effort

Subtask 2.3: Develop Analytic
Relationships

Oct 12	Nov 12	Dec 12	Jan 13	Feb 13	Mar 13	Apr 13	May 13	June 13
1 D1 3	4 D2	D3 D2f 6	5 D2f'		D4, D5 8 D4f, D5f			
		D6 	5 D7	D7f 3				D8

Deliverables

D1	Task 1 kickoff meeting	10/15/2012
D2	Task 1 Tech Memo (draft)	11/15/2012
D3	Teleconference	12/19/2012
D2f	Task 1 Tech Memo (final)	12/13/2012
D4	Smart Location Database (draft)	3/1/2013
D5	Task 1 Technical Report (draft)	3/7/2013
D4f	Smart Location Database (final)	4/1/2013
D5f	Task 1 Technical Report (final)	4/7/2013
D6	Literature Review	12/1/2012
D7	Task 2 Tech Memo (draft)	1/25/2013
D7f	Task 2 Tech Memo (final)	2/15/2013
D8	Task 2 Technical Report (draft)	6/15/2013
D8f	Task 2 Technical Report (final)	6/30/2013

EPA Review Period

Renaissance lead

Fehr & Peers lead

Sequence of Events

- 1 Both firms participate in kickoff meeting
 - 3 RPG begins process of running down data sources, starting with variables known to be necessary; begins discussions with EPA on issues re tricky varia
 - 4 RPG leads development of draft Task 1 memo (SLD development plan)
 - 5 RPG blends F&P literature review findings into final Task 1 memo
 - 6 RPG implements SLD development plan
 - 8 RPG completes its work on the SLD, delivers database
-
- 2 F&P does literature review, defines key variables for SLD
 - 3 F&P assists RPG and EPA in thinking through the "tricky" variables
 - 5 F&P assists RPG in incorporating the literature review recommendations into the final Task 1 memo
 - 6 F&P assists RPG in addressing database development issues
 - 7 F&P prepares its Task 2 memo (D7) which details the research plan to be followed in subtask 2.3
 - 9 F&P performs the analysis work under subtask 2.3, leading to final report

bles like unprotected lands and transit accessibility

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE OF PAGES 1 10				
2. AMENDMENT/MODIFICATION NO. 002		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO. See Schedule		5. PROJECT NO. (If applicable)			
6. ISSUED BY HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460		CODE HPOD		7. ADMINISTERED BY (If other than Item 6)		CODE			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) RENAISSANCE PLANNING GROUP, INC. Attn: NA 121 S ORANGE AVE STE 1200 Orlando FL 32801				(x)			9A. AMENDMENT OF SOLICITATION NO.		
							9B. DATED (SEE ITEM 11)		
				x			10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-11-009 0016		
							10B. DATED (SEE ITEM 13) 09/26/2012		
CODE (b)(4)		FACILITY CODE							

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) Net Increase: \$4,816.14
See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 52.243-2(a)(1) Changes - Cost-Reimbursement (Alt I), in accordance with FAR 43.204(a)
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: (b)(4)
Task Order #0016: Enhancing EPA's Smart Location Database and Performance Indicator
TOPO: Brett Van Akkeren Max Expire Date: 10/30/2013
The purpose of this modification is to:

- (1) Incorporate changes made to the statement of work (attached);
 - (2) Extend the period of performance from June 30, 2013 to October 30, 2013; and
 - (3) Add additional funding in the amount of \$4,816.14 to fully fund changes made to the statement of work in accordance with the contractors revised cost estimate dated 7/15/2013.
- Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Kathryn Barton	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA (Signature of Contracting Officer)	16C. DATE SIGNED

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED

EP-W-11-009/0016/002

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NAME OF OFFEROR OR CONTRACTOR

RENAISSANCE PLANNING GROUP, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>In accordance with FAR 43.204(c) by signing this supplemental agreement to the contract, the contractor hereby releases the Government from any further equitable adjustments attributable to this change, except for those cost associated with indirect rate adjustments.</p> <p>LIST OF CHANGES: Reason for Modification : Supplemental Agreement for work within scope Period Of Performance End Date changed from 2013-07-05 00:00:00 to 2013-10-30 00:00:00 Total Amount for this Modification: \$4,816.14 New Total Amount for this Version: \$69,656.94 New Total Amount for this Award: \$69,656.94 Obligated Amount for this Modification: \$4,816.14 New Total Obligated Amount for this Award: \$69,656.94 Incremental Funded Amount changed: from \$64,840.80 to \$69,656.94</p> <p>Maximum Potential Expiration Date changed to : 10/30/2013</p> <p>CHANGES FOR LINE ITEM NUMBER: 1</p> <p>Description changed to:</p> <p>Technical Assistance under EP-W-11-009, Task Order #0016: Enhancing EPA's Smart Location Database and Performance Indicator to be performed in accordance with the attached Statement of Work and the vendor's proposal dated July 27, 2012.*</p> <p>Ceilings and Funded Amounts: (Original)</p> <p>Cost: (b)(4) Fee: (b)(4) CPFF: \$64,840.80</p> <p>* and in accordance with SOW changes applied in contract modification 2 and the contractors approved cost estimate dated 7/15/2013. Below is the revised ceiling and funding amounts:</p> <p>Cost: (b)(4) Fee: (b)(4) Continued ...</p>				

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED

EP-W-11-009/0016/002

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NAME OF OFFEROR OR CONTRACTOR

RENAISSANCE PLANNING GROUP, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	CPFF: \$69,656.94 Total Amount changed from \$64,840.80 to \$69,656.94 Obligated Amount for this modification: \$4,816.14 Incremental Funded Amount changed from \$64,840.80 to \$69,656.94 End Date changed from 2013-07-05 00:00:00 to 2013-10-30 00:00:00 NEW ACCOUNTING CODE ADDED: Account code: 13-14-B-11W-301MA4-2505---1311W31026-001 Amount: \$4,816.14 Payment Address: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (D143-02) 109 TW Alexander Drive Durham NC 27711 Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (D143-02) 109 TW Alexander Drive Durham NC 27711 FOB: Destination Period of Performance: 09/26/2012 to 10/30/2013				

Statement of Work
Contract Number: EP-W-11-009/EP-W-11-010/EP-W-11-011
RFO Number: 16

- I. TITLE: Enhancing EPA's Smart Location Database and Performance Indicator
- II. PERIOD OF PERFORMANCE: Issuance to October 30, January 25 2013
- III. BACKGROUND:

Research studies indicate that the location of new homes and businesses can have an enormous effect on the travel behavior of people who will live and work there. For example, buildings in walkable communities that are well-served by transit can support a far greater variety of transportation choices than those in more automobile-dependent locations. Focusing new development in such areas can help reduce motor vehicle emissions and water pollution from roadway run-off. There is a growing demand among communities and facility managers for data products and tools that enable users to consistently compare multiple places based on characteristics of the build environment and urban form that shape travel behavior. In 2011 EPA's Office of Sustainable Communities began work to address this need through the development of the Smart Location Database (SLD). A beta version of this database (SLDv0.2b) was released publically in January 2012.¹ SLDv0.2b characterizes every Census 2000 block group in the U.S. using several variables which are demonstrated in the transportation research literature to have a measureable effect on travel demand. These variables are all related to factors known as the "five Ds" (Cervero and Kockelman 1997; Ewing et al. 2007): *density* (of population, housing, or jobs), land use *diversity*, urban *design*, *destination* accessibility, and *distance* to transit. Whereas many residential travel demand studies focus on accessibility of residential locations to jobs, SLDv0.2b also characterizes the accessibility of a location to working-age population. This latter category of variables may be of use in employment facility siting decisions.

SLDv0.2b is currently being used by EPA's Office of Sustainable Communities in collaboration with Office of Solid Waste and Emergency Response to evaluate the potential air and water quality impacts of redeveloping brownfields that have received EPA assistance. For instance, using the D measures it is possible to roughly compare the Vehicle Miles Traveled (VMT) generated by new households in redeveloped brownfields properties when compared to new households in the fastest growing areas of the same metropolitan region. SLDv0.2b has also been used to develop a model for estimating new impervious surface area associated with residential and commercial development based on location. This model is being used to compare impervious surface growth associated with brownfield redevelopment when compared to the alternative likely development scenario.

EPA is currently exploring how we can make future versions of the SLD freely accessible to practitioners by direct download and Web service. We hope that making this data freely available will make it cheaper and easier for communities to conduct travel demand or scenario planning

¹ A zip file with the entire SLD geodatabase, a detailed technical report, and a data dictionary is available for download at <https://edg.epa.gov/data/Public/>. Click to expand the "Office of Policy" folder. The file is named SLDv02b.zip.

analyses. Access to this data would be particularly helpful to local and regional governments that lack extensive GIS capabilities and/or sophisticated travel forecasting models.

In addition to raw data about “D” variables, non-technical users of the data need simplified metrics representing the overall performance of a place in terms of its ability to support sustainable travel choices. For instance, the General Services Administration seeks to develop a location efficiency key performance indicator for use in consistently assessing individual federal facilities as well as proposed federal facility locations. GSA also requires the ability to identify facilities that perform significantly worse than the regional average in terms of location efficiency. Such an indicator would support GSA and its clients in meeting their sustainability goals under Executive Order 13514 and other directives. EPA is working with GSA to develop this indicator, drawing on the Smart Location Database.

To date there have been only a limited number of studies that measure the effect of the built environment on attracted trips at the workplace location. EPA’s work to eventually develop a sustainable location performance indicator for workplaces requires first surveying and expanding on previous research in order to develop more robust quantitative measures that can be generalized for metropolitan regions across the U.S.

IV. PURPOSE AND OBJECTIVE:

There are two key objectives that this Task Order will address. First is to develop a new version of the SLD using Census 2010 geographic boundaries. The purpose of this activity is to make the SLD easier to update as new Census data become available and to incorporate new variables known to have a significant effect on attracted trips at the workplace location. For some of the regional accessibility metrics, the data values in SLDv0.2b, we are looking for a simple reaggregation to the new 2010 boundaries (see task description below for details). Some other metrics will need to be gathered and/or recalculated from scratch. Specifically, EPA is aware that the intersection density metric currently available in SLDv0.2b has both technical and conceptual problems that need to be addressed to improve its accuracy, reliability, and usability. Additionally, the land use diversity metric may benefit from considering a larger set of employment categories. Since EPA will be asking the contractor to make technical recommendations regarding ~~minor~~ refinements to metric calculations that will enhance the usability of the SLD for transportation practitioners, the personnel working on this Task Order will need to demonstrate considerable experience working with “D” variables in travel demand studies.

This Task Order will also expand the new SLD by adding additional demographic and socioeconomic variables relevant to travel demand. See Attachment A.

The second objective of this Task Order is to quantify the effect of SLD variables on VMT per worker, by workplace location. In other words, the contractor shall build upon existing research and conduct additional analysis to quantitatively assess the relationship between individual “D” variables (or interactions between multiple “D” variables) and the VMT of workers who work at that location. Ideally, travel to/from work as well as work-based trips (e.g., lunch) will be included in this analysis. To the extent possible, these findings shall be generalized for relevance to

communities across the U.S. EPA recognizes that there may be multiple ways to conceptualize and implement this kind of study ~~indicator~~. Therefore, we will ask the Contractor to propose an approach to measuring workplace location efficiency which builds off of emerging methods in quantifying the relationship between “D” factors and travel demand.

V. QUALITY ASSURANCE (QA) REQUIREMENTS

The contractor shall submit with their technical proposal a short written Quality Assurance Project Plan since this project generates environmental data.

VI. TASKS AND DELIVERABLES

The Task Order Contracting Officer Representative (TO COR) shall review all deliverables in draft form and provide revisions and/or comments to the contractor. The Contractor shall prepare the final deliverables incorporating the TO COR’s comments. The Contractor shall provide the TO COR with electronic versions of all deliverables. Deliverables shall be submitted as Microsoft Word documents or in another format that can be easily edited by EPA.

Contractor personnel shall at all times identify themselves as Contractor employees and shall not present themselves as EPA employees. Furthermore, they shall not represent the views of the U.S. Government, EPA, or its employees. In addition, the contractor shall not engage in inherently governmental activities, including the actual determination of EPA policy and preparation of documents on EPA letterhead.

Task 1: Update the SLD to reflect 2010 Census geographic boundaries

II.A.1.c: Spatial Analysis and Geographic Information Systems

In preparation for a project kick-off call, the contractor shall review relevant research into the effect of the built environment at the workplace location on travel. The contractor shall also review SLDv0.2b and all accompanying documentation. The contractor shall also review and evaluate Attachment A -- a list of data elements to be included in the updated SLD. During the project kick-off call, the contractor, TO-COR, and EPA technical staff shall discuss options regarding the overall approach taken to complete Task 1 and Task 2. Given that many of the data variables developed during Task 1 are to be evaluated for affect on VMT in Task 2, it is understood that the two tasks are highly interrelated and must be treated as such.

Based on this discussion, the contractor shall then produce a memo (draft Task 1 memo) with recommendations for updating this geodatabase to reflect information about all census block groups (CBGs) in the U.S. based on 2010 census geographic boundaries². This memo shall feature a table that includes all of the data elements and columns listed in Appendix A. If the contractor proposes an alternative metric or data source for any of the variables, this should be clearly noted in the table. In this memo, the contractor shall also recommend any equivalent alternative data elements that the contractor feels would enhance the usefulness of the new database. The

² Note that EPA has all 2006-2010 American Community Survey data available in a single file geodatabase. Data is available in at the block group level, with full U.S. coverage. TIGER 2010 block group boundaries are also available in this geodatabase. EPA can provide this data to the contractor for the purpose of building the SLD.

contractor shall also recommend additional relevant demographic or socioeconomic variables that could be included in the new database with little additional effort.

With regard to the variable “Ac_Unpr”, or total acres of land that is not protected from development, the contractor shall specify the analysis method with which this variable will be derived. It is suggested that data on the location of parks and protected land areas from NAVTEQ and PADUS be clipped out of Census block groups in order to calculate the total land area of the block group that is not protected from development. Doing so has the potential to provide more accurate density metrics (D1 and maybe D3).

When developing recommendations to include in the draft Task 1 Memo, the contractor shall evaluate whether D5a and D5b (see Attachment A) accessibility metrics could be derived from SLDv0.2b by first assigning accessibility values in SLDv0.2b to a new raster grid. This raster would be constructed by assigning SLDv0.2b accessibility values to Census 2000 block group population-weighted centroids and then interpolating a raster field of accessibility values for points in between. The evaluation shall consider whether Zonal Statistics (or similar procedure) could then be used to calculate the mean accessibility value for each 2010 census block group. Central to this evaluation will be an assessment of whether changes in block group boundaries between Census 2000 and Census 2010 are drastic enough to undermine the meaningfulness of accessibility metrics derived in the fashion described above. With regards to D5b the contractor shall also evaluate whether significantly better results could be achieved by leveraging an existing SQL database containing all feasible transit + walking trips within 30 minutes (from Census 2000 origin block group population-weighted centroid to Census 2000 destination block group population-weighted centroid)³ as well as an alternative source of employment data. Furthermore, the contractor shall determine whether an alternative metric of destination accessibility via transit can be developed that supersedes D5b (see discussion of D5c below).

The contractor shall develop a methodology for calculating a revised variable D5br – Jobs within a 30 minute transit commute- to include the possibility of the traveler making one transfer for each potential commute. The contractor shall also prepare the necessary data used in this variable for analysis by EPA. The contractor shall document this methodology and data preparation as part of the task 1 technical report.

With regard to distance to transit (D4) the contractor shall recommend one or more metrics of transit accessibility at the workplace location that are known to have a significant effect on VMT. To the extent that it is feasible within the scope of this work order, the contractor shall leverage publically available GTFS (general transit feed specification) data sources to calculate these metrics in as many metropolitan regions as possible. However, the contractor shall prioritize the development of these metrics for a subset of metropolitan regions that can serve on the basis for measuring the effect of SLD variables on VMT necessary for completing Task 2.

³ The SQL database and full documentation will be provided by EPA. See the SLDv0.2 technical report Appendix A for a description of the methodology used to derive this database.

With regard to D5c (alternative measure of destination accessibility via transit), the contractor shall evaluate whether publically available data sources (such as GTFS and the CTOD fixed guideway transit service database⁴) can be used to create an enhanced measure with greater coverage than can be provided by D5b. The Contractor shall consider ~~propose a methodology for~~ developing a simple model to identify all CBG accessible from the origin CBG using simple assumptions about walking speed to/from a transit stop, transit speed by vehicle type, and the measured distance between stops on a single line. The Contractor shall identify the level of effort anticipated to complete such an analysis as well as the anticipated usefulness of the resulting dataset.

Upon delivery of the draft Task 1 memo, the contractor shall schedule a conference call with EPA staff. Following this call the TO-COR will provide technical guidance to the contractor regarding proposed data sources and methodologies. Upon receiving this guidance, the contractor shall update the memo, documenting proposed data sources and methodologies. Upon approval of final Task 1 memo by the TO-COR, the contractor shall produce the updated SLD. The new SLD shall be developed as a single ESRI file geodatabase that includes variable data values for every U.S. census block group, unless otherwise indicated in the “coverage” column of Attachment A. For variables that rely on data sources that do not have national coverage (e.g., D4b, D5b), block groups in areas not covered shall be given a value of NULL.

Upon completion of the new SLD, the Contractor shall prepare a draft technical report detailing the data sources and methodology of calculation for each variable. The Contractor shall derive much of the content for this technical report from the final Task 1 memo.

Within 7 days of receiving TO-COR comments on the draft technical report, the contractor shall prepare a final technical report incorporating the TO-COR’s comments.

Task 2: Measure the effect of SLD built environment variables on worker VMT

II.A.1.c: Spatial Analysis and Geographic Information Systems

Within two weeks of completing Task 1, the contractor shall develop a technical memorandum that describes proposed research plan for completing Task 2. This plan shall describe the data sources and methods of analysis that the contractor will use to measure the effect of workplace-location SLD variables on VMT per worker relative to other census block groups within the same metropolitan region. As noted above, “VMT per worker” should ideally consider trips to/from work as well as work-based travel (e.g., lunch). The contractor may propose an alternative metric of worker travel if doing so will enhance the feasibility of this task or meaningfulness of findings.

These measures of effect may be assessed with regard to individual SLD variables. Or they may be explored in terms of the interaction between multiple SLD variables, summarized as a spectrum of different place types. It is expected the contractor will obtain travel survey data relevant to travel by workplace location for the purpose of this analysis. EPA technical staff will try to be of assistance in data acquisition if a federal data source is sought.

⁴ This database includes information about each transit stop as well as the transit line served by that stop. Data will be provided by EPA.

Upon delivery of the technical memorandum a conference call shall be scheduled with the TO-COR and EPA technical staff to discuss options and approaches. Upon receipt of TO-COR comments on the technical memorandum, the Contractor shall revise the memo as necessary and proceed with the analysis.

Upon completion of analysis, the contractor shall deliver a draft Task 2 Technical Report that details the following:

- A brief literature review describing the relevance of the present study to previous statistical studies of built environment effects on travel by workplace location.
- A description of a data sources used in this study (referencing the Task 1 memo for details, as appropriate).
- A description of the research methodology.
- A presentation of research findings.
- A brief discussion of limitations and areas for further research.
- A discussion of how these research findings could be used to inform the design of a smart location performance indicator that can be used to compare block groups within the same metropolitan region with regards to relative differences in expected VMT per worker (or similar metric).

Within 7 days of receiving TO-COR comments on draft Task 2 Technical Report, the Contractor shall deliver a final Task 2 Technical Report addressing the TO-COR comments.

SCHEDULE FOR DELIVERABLES: (See Contract Modification 1 for revisions made to deliverable schedule)

The contractor shall provide the following specific deliverables to the EPA TO-COR:

	DELIVERABLE	FORM AND QUANTITY	SCHEDULE
Task 1:	Project kick-off discussion	1 (estimated time: 1 hour)	TBD Summer 2012
Task 1:	Task 1 memo	1 memo, 6-10 pages, MS Word format	<ul style="list-style-type: none"> • Draft memo delivered within 25 business days of project kick-off discussion • Modifications to draft memo delivered within 10 business days of receiving TO-COR comments.
Task 1:	Conference call	1 (estimated time: 1 hour)	Scheduled upon receipt of draft Task 1 memo
Task 1:	Smart Location Database	1 ESRI File Geodatabase containing SLD data values for all census block groups in the U.S.	<ul style="list-style-type: none"> • Draft SLD delivery TBD • If revisions are necessary, finalized SLD delivered within 7 business days of receiving TO-COR comments.

Task 1:	Task 1 technical report	1 technical report, 12-20 pages, MS Word format	<ul style="list-style-type: none"> • Draft report delivered with Smart Location Database • If revisions are necessary, final report delivered within 7 business days of receiving TO-COR comments.
Task 2:	Task 2 technical memo	1 memo, 3-5 pages, MS Word format	<ul style="list-style-type: none"> • Draft memo delivered within 15 business days of Task 2 kick-off conference call. • If revisions are necessary, final Task 2 memo delivered within 7 business days of receiving TO-COR comments.
Task 2:	Task 2 technical report	1 report, 12-20 pages, MS Word format	<ul style="list-style-type: none"> • Draft report delivered within 30 business days of TO-COR approval of Task 2 technical memo. • If revisions are necessary, final report delivered within 7 business days of TO-COR comments.

References

- Cervero, R. and K. Kockelman. "Travel Demand and the 3Ds: Density, Diversity, and Design." *Transportation Research Part D*, Vol. 2, 1997, pp. 199–219.
- Ewing, R., K. Bartholomew, S. Winkelman, J. Walters, and D. Chen. 2007. *Growing Cooler: The Evidence on Urban Development and Climate Change*. Urban Land Institute.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES	
						1 2	
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
003		See Block 16C		PR-OA-13-00043			
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
HPOD							
HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460							
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x) 9A. AMENDMENT OF SOLICITATION NO.			
RENAISSANCE PLANNING GROUP, INC. Attn: NA 121 S ORANGE AVE STE 1200 Orlando FL 32801				9B. DATED (SEE ITEM 11)			
				x 10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-11-009 0016			
				10B. DATED (SEE ITEM 13) 09/26/2012			
CODE		(b)(4)		FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) Period of performance extension in accordance with FAR 43.103(a)(3)

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: (b)(4)

Task Order #0016: Enhancing EPA's Smart Location Database and Performance Indicator

TOPO: Brett Van Akkeren Max Expire Date: 01/14/2014

The purpose of this modification is to extend the Task Order period of performance from October 30, 2013 to January 14, 2014 at no additional cost to the government.

LIST OF CHANGES:

Reason for Modification : Other Administrative Action

Period Of Performance End Date changed from 2013-10-30 00:00:00 to 2014-01-14 00:00:00

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
		Kathryn Barton	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		(Signature of Contracting Officer)	

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED

EP-W-11-009/0016/003

PAGE OF

2

2

NAME OF OFFEROR OR CONTRACTOR

RENAISSANCE PLANNING GROUP, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Maximum Potential Expiration Date changed to : 01/14/2014</p> <p>CHANGES FOR LINE ITEM NUMBER: 1 End Date changed from 2013-10-30 00:00:00 to 2014-01-14 00:00:00</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (D143-02) 109 TW Alexander Drive Durham NC 27711</p> <p>FOB: Destination Period of Performance: 09/26/2012 to 01/14/2014</p>				